Arabis falcifructa Rollins (1982)

ELKO ROCKCRESS

FAMILY: *Brassicaceae*, the mustard family.

SYNONYMS: *Arabis cobrensis* (misapplied)

STATUS:

Heritage Program SENSITIVE LIST, ranks: G1G2 S1S2

USFWS/ESA: species of concern. STATE OF NEVADA: none. BLM: Special Status Species. USFS: none.

NNNPS: watch list.

POPULATION CENSUS: 8 occurrences mapped at 1.0 km (0.6 mi) separation, OR **9 occurrences mapped** at 0.16 km (0.1 mi) separation; total estimated **individuals 539**+, total estimated **area 13.8**+ **ha (34.1**+ **ac)**. **TREND:** unknown.

IMPACTS AND MAJOR THREATS: Threatened by trampling of soil crust by grazing animals, fires and consequent cheatgrass replacement, fire suppression activities, and road construction and maintenance.

INVENTORY EFFORT: Systematic surveys have been conducted, but much potential habitat remains to be examined. Most recent entered survey 1992, average year of last survey 1990. **Years since last entered survey** (percent of mapped records at various survey ages): **6-10 yrs:** 88.9%; **21-30 yrs:** 11.1%.

LAND MANAGEMENT in decreasing predominance: U. S. Bureau of Land Management, Nevada state lands (?).

RANGE: Elko and Lander counties, Nevada. **Nevada endemic.** Maximum **range dimension 46.6 km (28.9 mi)** excluding most disjunct record. **Type specimen** collected in Elko County.

ELEVATIONS RECORDED: 5300-6100 feet (1615-1859 meters).

HABITAT: Dry, densely vegetated, relatively undisturbed, light-colored silty soils with a high cover of moss and other soil crust components on moderate to steep north-facing slopes in the sagebrush zone, dominated by moss, Artemisia tridentata var. wyomingensis, Chrysothamnus viscidiflorus var. puberulus, and Poa secunda var. secunda. Also reported but not confirmed from rock crevices.

PHENOLOGY: flowering early-spring. Range of most frequent survey months: June-July.

LIFE-FORM AND HABIT: perennial herb.

DESCRIPTION: A perennial herb, 2-4.5 dm tall, with densely hairy lower leaves and pale purple flowers, fruiting in May and June.

PHOTOGRAPHS: Morefield (1997); Nevada Natural Heritage Program slide collection (1986-present).

ILLUSTRATIONS: Morefield (1997).

OTHER GENERAL REFERENCES (listed separately): Rollins (1993).

SPECIFIC REFERENCES:

Lesica, P. and J. Shelly. 1992. Effects of cryptogamic soil crust on the population dynamics of Arabis fecunda (Brassicaceae). American Midland Naturalist 128: 53-60.

Morefield, J. D. 1997. Current knowledge and conservation status of Arabis falcifructa Rollins (Brassicaceae), the Elko rockcress. Carson City: Nevada Natural Heritage Program, status report prepared for the Bureau of Land Management, Reno.

Rollins, R. C. 1982. Studies on Arabis (Cruciferae) of western North America II. Contributions from the Gray Herbarium 212: 103-114.

OF FURTHER INTEREST: Moss cover may be important for survival of older plants (Lesica and Shelly 1992), and has been substantially impacted by livestock trampling. Closely related to another rare Nevada species, Arabis bodiensis Rollins.